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(54) Title: OLIGONUCLEOTIDE COMPOSITIONS WITH ENHANCED EFFICIENCY

(57) Abstract: The oligonucleotide compositions of the present invention make use of combinations of oligonucleotides. In one aspect, the invention features an oligonucleotide composition including at least 2 different oligonucleotides targeted to a target gene. This invention also provides methods of inhibiting protein synthesis in a cell and methods of identifying oligonucleotide compositions that inhibit synthesis of a protein in a cell.

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## INTERNATIONAL SEARCH REPORT

International application No.

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## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C07H 21/04; A61K 48/00; C12N 15/00

US CL : 435/375, 377; 536/24.1, 24.5; 514/44

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 435/375, 377; 536/24.1, 24.5; 514/44

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
WEST, CAPLUS, EMBASE, MEDLINE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|------------|---|-----------------------|
| Y          | UHLMANN et al., Antisense Oligonucleotides: A New Therapeutic Principle. Chemical Reviews. June 1990, Vol. 90, No. 4, pages 543-583, see especially page 562. | 1-33                  |
| Y          | US 5,885,834 A (EPSTEIN) 23 March 1999 (23.03.1999), see entire document.   | 1-33                  |
| Y          | US 6,579,856 B2 (MERCOLA) 17 June 2003 (17.06.2003), see especially column 10.  | 1-33                  |

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